

GE 159 Plastics Avenue Pittsfield, MA 01201 USA



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Transmitted Via Overnight Courier

May 25, 2005

Mr. William P. Lovely, Jr.
United States Environmental Protection Agency
EPA - New England (MC HBO)
One Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

Re: GE-Pittsfield/Housatonic River Site Newell Street Area II (GECD450)

Final RD/RA Work Plan Addendum for Newell Street Area II

Dear Mr. Lovely:

I. Introduction

On March 3, 2005, the General Electric Company (GE) submitted to the U.S. Environmental Protection Agency (EPA) a document titled *Final Removal Design/Removal Action Work Plan for Newell Street Area II* (Final RD/RA Work Plan). Subsequent to the submittal of the Final RD/RA Work Plan, various written comments and responses have been exchanged among GE, EPA, and the Natural Resource Trustees for the GE/Housatonic River Site (Trustees), including the following:

- A May 12, 2005 letter from EPA to GE conditionally approving the Final RD/RA Work Plan;
- An April 25, 2005 letter from the Trustees to GE commenting on the proposed scope of natural resource restoration/enhancement activities presented in the Final RD/RA Work Plan;
- A March 23, 2005 memorandum from Woodlot Alternatives, Inc. (Woodlot) to the Trustees also commenting on the proposed scope of natural resource restoration/enhancement activities presented in the Final RD/RA Work Plan (this memorandum was transmitted to GE as an attachment to the above-referenced letter from the Trustees to GE); and
- An April 29, 2005 letter from GE to the Trustees responding to comments provided in their April 25, 2005 letter to GE.

As directed or otherwise specified in the correspondence listed above, several of the comments were to be addressed in an Addendum to the Final RD/RA Work Plan (Addendum). This letter serves as that Addendum and provides GE's responses to the comments provided in the above-referenced correspondence. Specifically, Part II of this Addendum addresses the comments raised by EPA in its May 12, 2005 conditional approval letter, while Part III addresses items presented in the Trustee's April 25, 2005 letter to GE and accompanying March 23, 2005 memorandum from Woodlot.

II. GE's Response to the May 12, 2005 Letter from EPA

The May 12, 2005 letter from EPA to GE conditionally approving the Final RD/RA Work Plan contained four comments. As indicated by EPA in that letter, Comment Nos. 3 and 4 do not require a response; therefore, this section provides GE responses to Comment Nos. 1 and 2.

EPA Comment No. 1 – Certain removal elevations presented in Technical Drawing 3 of the Work Plan appear to be inconsistent with the proposed removal depths in the Conceptual RD/RA Work Plan. For example, the first bullet on Page 4-3 of the Work Plan indicates that Condition No. 2(a) of soil removal associated with RAA13-F91 to a depth of 5 feet within Utility Area 2. However, as depicted on Technical Drawing 3, the proposed removal elevation in this area is 979 feet above mean sea level (amsl), while the ground surface elevation within this area varies from 980 feet amsl to 984 feel amsl. GE shall explain how removal elevations were established during the development of the Work Plan to correspond to the depths specified in the Conceptual RD/RA Work Plan.

GE Response – For PCBs, when it is determined that soil removal within a Removal Action Area (RAA) is necessary in order to achieve the applicable Performance Standards, the appropriate Theissen polygon(s) and depths are identified for removal. For Newell Street Area II, the results of these evaluations and the proposed conceptual horizontal and vertical limits of removal were initially presented in the Conceptual RD/RA Work Plan. In that document, the proposed removal limits were identified by showing the various Theissen polygon(s) subject to removal and the removal depth associated with that polygon, relative to the ground surface. The process of subsequently converting the removal depths presented in the Conceptual RD/RA Work Plan to removal elevations in the Final RD/RA Work Plan involves further review of the specific pre-design sampling locations corresponding to the Theissen polygon(s) to be removed. Specifically, a removal elevation is determined by subtracting the identified removal depth within each polygon from the existing ground surface elevation of the pre-design sampling location requiring removal. As a conservative measure and for constructability purposes, the calculated removal elevation is then rounded to the next lowest whole number and included in the Technical Drawings provided in the Final RD/RA Work Plan. For example, the removal elevation identified within Utility Area 2 for location RAA13-F91 was developed by subtracting the depth of removal (5 feet below ground surface) from the existing ground surface elevation at that sample location (984.1 feet amsl). The calculated removal elevation (979.1 feet amsl) was then rounded to 979 feet. In instances where specific elevation data are not available for the sample locations requiring removal, topographic contour lines are used to estimate the ground surface elevation under existing conditions for the sample location.

For the proposed removal within Utility Area 2 associated with location RAA13-F91, there is a change in the existing ground surface elevation within the removal polygon of approximately four feet associated with a surface water drainage ditch/swale. This is a relatively large grade change, as most of the Theissen polygons throughout the RAA have a more uniform surface elevation. Nevertheless, as described above, the procedures used for evaluating the elevations used in the Final RD/RA Work Plan ensure that the proposed soil removal within Utility Area 2 will address the elevated PCB levels specifically detected within the top 5 feet of soil located at sample location RAA13-F91, thereby lowering the average remaining PCB levels within that area.

EPA Comment No. 2 – In addition to the information provided in Attachment D of the Work Plan, GE shall provide EPA with an expanded discussion of how it reached the conclusion that approximately 6,270 cubic yards of flood storage capacity would be lost as a result of the installation of the engineered barriers shown on Technical Drawings 5B and 6B. The discussion shall also describe where within the 100-year floodplain GE is considering offsetting the loss of flood storage capacity within Newell Street Area II.

<u>GE Response</u> – The estimated loss in flood storage capacity (approximately 6,270 cy) resulting from the proposed response actions within Newell Street Area II is primarily due to the planned installation of the engineered barrier across the existing GE Parking Lot Area. In addition to the thickness of the barrier itself (i.e., approximately 12 inches), certain other aspects of the barrier installation result in the

placement of additional materials and a corresponding loss in the existing flood storage. These items include additional grading material to create a properly-sloped barrier subgrade and final restoration surface to facilitate drainage, and the installation of the asphalt access road. To determine the overall net change (loss) in flood storage capacity, the existing topographic conditions were compared to the anticipated, final topographic conditions. This calculation was performed using Terra Model TM digital terrain software, as described in Attachment D of the Final RD/RA Work Plan.

The second part of the EPA comment requests that GE describe where within the 100-year floodplain compensatory flood storage may be provided. In response, GE has performed preliminary evaluations of potential flood storage gains and losses associated with various projects that have or will be conducted by GE in close proximity to the GE Plant Site. These include the Newell Street Area I, Newell Street Area II, Lyman Street Area, Former Oxbow Areas A and C, Former Oxbow Areas J and K, and East Street Area 2-South RAAs; the demolition activities associated with the Thermal Oxidizer and 60s Complex; and the river/riverbank removal actions related to the Building 68 Area and ½-Mile Reach. Based on information concerning the actual and/or anticipated activities within each of these areas, GE anticipates that there will be an overall net gain within the 100-year floodplain (in excess of approximately 10,000 cy). This excess is primarily anticipated to be a result of demolition activities within the 60's Complex. Separate from this Addendum, GE will provide a letter to EPA presenting the results of the preliminary flood storage volume assessment.

III. GE's Response to the April 25, 2005 Letter from the Trustees

The April 25, 2005 letter from the Trustees to GE contained four comments. GE provided responses to these comments in a letter to the Trustees dated April 29, 2005. Certain GE responses indicated that the Addendum to the Final RD/RA Work Plan would contain additional information related to the associated comments.

Trustee Comment No. 2 - Paved Access Road

Newell Street RD/RA Page 5-4: GE has determined that paving the access road is reasonable and justified by 1) providing greater protection of the engineered barrier components and 2) requiring less maintenance.

• Trustee Comment: The Trustees concur with this justification. However, the proposed access road on parcel J9-12-23 will diminish the natural resource restoration/enhancement due to the loss of required grassland habitat. The Trustees therefore require GE provide additional restoration/enhancement to compensate for the area lost. Such request is consistent with the Conceptual RD/RA, Page 3-15: ".... GE may discuss w/ EPA & Trustees the possibility of installing a paved or gravel engineered barrier in lieu of vegetative in a portion of the parking lot.... If so, GE would discuss conducting the planting that would have occurred be implemented in another portion."

GE Response – In accordance with the response GE provided in its April 29, 2005 letter to the Trustees, GE will provide additional habitat area to offset the area to be occupied by the paved access road. The area of the paved access road is approximately 7,400 square feet (sq. ft.). GE will provide compensation for a portion of the wooded area within Parcel J9-23-12 adjacent to the Newell Street parking lot area, as shown in attached Technical Drawing 1. Natural resource restoration/enhancement activities within this area will be consistent with those specified in the Final RD/RA Work Plan.

<u>Trustee Comment No. 3 – Maintenance and Monitoring Requirements</u>

Newell Street Page 8-3, 8.3.1 Periodic Inspections; Page 8-4, 8.3.3 Inspection Schedule and Reporting: The Natural Resource Restoration/Enhancement area shall be inspected only 2 years following planting and installation of vegetative material.

- Trustee Comment: The inspection and monitoring schedule for the vegetative-engineered barrier is set in Technical Attachment I, Section 8 which requires two inspections per year for the first 3 years, and once during the fifth and seventh years, etc. The RD/RA sections specify semi-annual monitoring during the 2-year period following installation but do not specify requirements beyond this time. The sections should be consistent with and reference Attachment I requirements.
- An apparent deficiency in the Final RD/RA relates to the requirement in Paragraph 119 of the CD, which states that "Settling Defendant shall develop and include in each such RD/RA Work Plan a detailed Restoration Project Monitoring and Maintenance Plan for the pertinent Restoration Work component." The Final RD/RA does not include a description of project monitoring or maintenance, as required.

<u>GE Response</u> –GE has developed a Restoration Project Monitoring and Maintenance Plan for the vegetative engineered barrier within the Newell Street parking lot area. As indicated in the Final RD/RA Work Plan, this area will be subject to natural resource restoration/enhancement activities. This plan is included in Attachment A of this Addendum.

Trustee Comment No. 4 – Flood Storage Capacity

Per the attached Woodlot memorandum, a more detailed description should be provided regarding suitable locations for flood storage compensation for losses resulting from work at the Newell Street Area II Removal Action Area.

<u>GE Response</u> – This comment is addressed in GE's response in Part II above to Comment No. 2 of EPA's May 12, 2005 conditional approval letter.

<u>Woodlot Comment</u> - Page 5-5, Section 5.7 Natural Resource Restoration/Enhancement Activities, 1st Bullet: The Latin name for blue vervain, Verbena hastata, is missing. Woodlot understands that the listed plant species are examples of species that may be used in the seed mix to establish the specified native herbaceous vegetation community for the proposed restoration activities of the GE Newell Street Parking lot area. To facilitate achieving the herbaceous cover performance standards, it is suggested that the applied warm-season grasses and wild flower seed mix include species that are (1) native to Berkshire County, and (2) applicable to the hydrologic regime of the restoration site.

GE Response – GE anticipates using the wildflower mix specified in Attachment B. This mix was provided by New England Wetland Plants, Inc. Note that GE will substitute Showy Tick-trefoil (Desmodium canadense) for Partridge Pea (Chamaecrista fasciculate) based on Trustee comments provided for the ½-Mile habitat restoration.

<u>Woodlot Comment</u> - Technical Specification Section 02212 (Topsoil, Seeding, and Mulch, 2.01.D (Products; Materials): The Latin name for blue vervain, Verbena hastata, is missing. This section should also give percentages for the seed mix. The specified rate of seed application for the native warm-season grass and wildflower mix (25 pounds per acre) may need to be adjusted based upon the actual composition of the applied seed mix.

GE Response - The seed mix specified in Attachment B gives a percentage breakdown per species and also specifies an application rate of 15 pounds per acre. Further, to ensure soil stability and prevent erosion, a nurse crop of annual rye-grass will be included in the seed mixture. Following completion of the restoration activities, areas of sparse vegetation (if any) will be subject to re-seeding and mulching activities.

<u>Woodlot Comment</u> - Technical Specification Section 02212 (Topsoil, Seeding, and Mulch, 2.01.H (Products; Materials): The use of a biodegradable, extended-term erosion control matting (e.g., North American Green SC150BN or C125BN) is suggested as a substitution for the specified permanent erosion control matting (North American Green P300P, or equivalent) for use in areas where natural resource/restoration and enhancement activities will be performed.

<u>GE Response</u> – Technical Section 02212 specifies temporary erosion control matting (North American Green S75 or equivalent) to be used in areas where natural resource restoration/enhancement activities will be performed.

<u>Woodlot Comment</u> - Page 5-5, Section 5.7 Natural Resource Restoration/Enhancement Activities, 2nd Bullet: GE is proposing to remove stump roots and branches that are to be installed in the planned native grassland community. The CD specifies the placement of stumps but does not note the removal of branches and roots. It is suggested that the stumps from uncontaminated areas be installed with roots and branches attached, where practical, to enhance wildlife habitat diversity.

GE Response – Technical Attachment I, Section 3.2 of the SOW states that "The stumps will be taken from uncontaminated areas and will be trimmed of roots and branches before placement." Based on this requirement, GE anticipates trimming the roots and branches from the stumps prior to placement.

<u>Woodlot Comment</u> - Attachment B, Plan Sheet 9: The front panel width of the specified bluebird "house" is specified as 5 inches. A review of the proposed construction method and material dimensions suggest that this should be 6.5 inches.

GE Response – GE will increase the front panel width of the bluebird house from 5 to 6.5 inches.

<u>Woodlot Comment</u> - Attachment B, Plan Sheet 9: Predator guards should be installed on the posts supporting bluebird boxes. A reference describing the construction and installation of predator guards is http://permanent.access.gpo.gov/lps14550/e bluebird.pdf.

GE Response – GE will install a predator guard on the post supporting the bluebird house.

<u>Woodlot Comment</u> - Page 5-6, Section 5.8 Flood Storage Capacity: This section states that the proposed work will result in a loss of 3,270 cubic-yards (3.9 acre-feet) of flood storage capacity, and that "GE will obtain the necessary flood storage compensation through gains in flood storage capacity resulting from other projects within the 100-year floodplain." The definition of "Flood Storage Compensation" in the CD includes the following:

"...Flood Storage Compensation shall be provided at the same elevation and within the same general waterbody stretch as the activities causing or contributing to the loss of flood storage capacity..."

Based on this definition, it is suggested that a more detailed description be provided regarding suitable locations for flood storage compensation for losses resulting from work at the Newell Street Area II Removal Action Area.

GE Response – This comment is addressed in GE's response in Part II above to Comment No. 2 of EPA's May 12, 2005 conditional approval letter.

Please call Dick Gates if you have any questions about this Addendum.

Sincerely,

T. Silfer/Acc Andrew T. Silfer, P.E. **GE Project Coordinator**

Enclosure

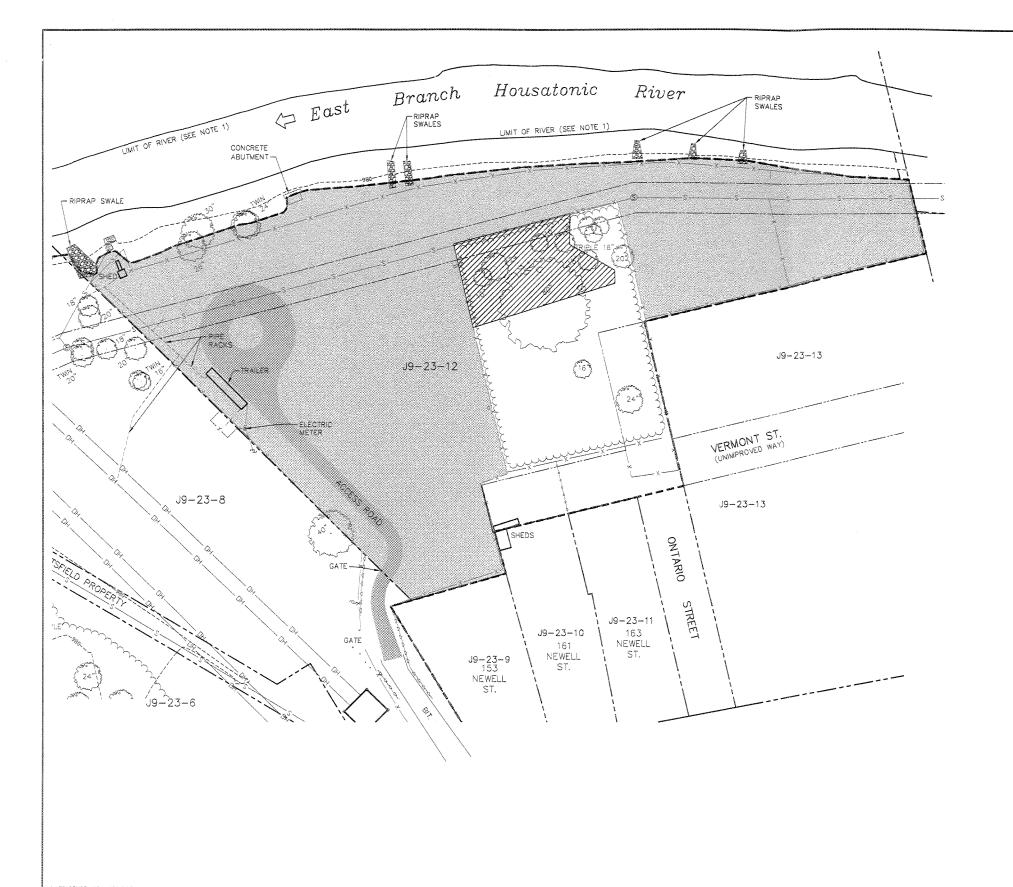
Dean Tagliaferro, EPA Tim Conway, EPA Holly Inglis, EPA Rose Howell, EPA* K.C. Mitkevicius, USACE Susan Steenstrup, MDEP (2 copies) Anna Symington, MDEP* Robert Bell, MDEP* Thomas Angus, MDEP* Linda Palmieri, Weston (2 copies, 1 extra copy of oversized figures) Nancy E. Harper, MA AG* Dale Young, MA EOEA Michael Chelminski, Woodlot

Mayor James Ruberto, City of Pittsfield Pittsfield Department of Health Jeffrey Bernstein, Bernstein, Cushner & Kimmell Teresa Bowers, Gradient Michael Carroll, GE* Richard Gates, GE Roderic McLaren, Esq., GE* James Nuss, BBL James Bieke, Goodwin Procter Barbara Charest, Northeast Utilities Service Co. Charles Nicol, Northeast Utilities Service Co. Charles J. Dooley, Western Mass. Electric Co. **Public Information Repositories** GE Internal Repository

^{*}cover letter only

Technical Drawing





LEGEND

APPROXIMATE RAA BOUNDARY --- EASEMENT J9-23-12 PARCEL ID ----- CHAIN LINK FENCE WOODEN FENCE - OH --- OVERHEAD WIRES - SANITARY SEWER - APPROXIMATE TOP OF BANK GUARD RAIL APPROXIMATE EDGE OF WATER BUSHES/HEDGE SANITARY MANHOLE DECIDUOUS TREE UTILITY POLE GE PARKING LOT AREA — AREA SUBJECT TO IMPLEMENTATION OF NATURAL RESOURCE RESTORATION/ENHANCEMENT ACTIVITIES ADDITIONAL AREA PROPROSED FOR NATURAL RESOURCE RESTORATION/ENHANCEMENT

NOTES:

- BASE MAP MODIFIED FROM SURVEY BY HILL ENGINEERS, ARCHITECTS & PLANNERS, DATED 12/9/03. LIMITS OF HOUSATONIC RIVER ARE APPROXIMATE ONLY.
- LOCATION OF UTILITIES SHOWN ARE APPROXIMATE ONLY. ADDITIONAL UTILITIES (ABOVE AND BELOW GROUND) MAY BE PRESENT AT THE SITE, THE LOCATIONS OF WHICH ARE NOT SHOWN AND MAY NOT BE KNOWN.

C 30193X00, X01, X02.DWG C ON=*, OFF=*REF P PAGESET/SYR-CDL 5/25/05 SYR-85-LAF NJR DM



GENERAL ELECTRIC COMPANY • PITTSFIELD, MASSACHUSETTS
NEWELL STREET AREA II RAA REMEDIAL ACTION

ADDITIONAL AREA PROPOSED FOR NATURAL RESOURCE RESTORATION/ENHANCEMENT

TECHNICAL DRAWINGS

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Blastand, Bouck & Lee, Inc Corporate Headquarters 6723 Towpath Road Syracuse, NY 13214 315-446-9120

Attachments



Attachment A

Restoration Project Monitoring and Maintenance Plan



Attachment A - Restoration Project Monitoring and Maintenance Plan

Introduction

Following the implementation of natural resource restoration/enhancement activities within the Newell Street parking lot area, GE will monitor, inspect, and maintain the plantings and structures in this area in accordance with the Performance Standards and other requirements set forth in Section 8 of Technical Attachment I in the Statement of Work for Removal Actions Outside the River (SOW). This Restoration Project Monitoring and Maintenance Plan (RPMMP) summarizes the monitoring and maintenance activities to be conducted by GE within the Newell Street parking lot area to satisfy the above-referenced Performance Standards. The scope of these monitoring and maintenance activities and associated reporting activities is summarized below.

Scope of Monitoring and Maintenance Activities

To achieve the applicable Performance Standards specified in Technical Attachment I, GE will implement this monitoring program following completion of response actions within the Newell Street parking lot area. The monitoring program will consist of two visits during each of the first three years after planting, one visit during the fifth year after planting, and one visit during the seventh year after planting. In each of the first three years after planting, visits will be conducted in the late spring after the first leaf flush (May/June) and in the summer (July/August) to assess plant survival. The single visit in the fifth year and seventh year after planting will be conducted in the summer (July/August).

Each monitoring visit will consist of a field inspection and survey of the Newell Street parking lot area. Estimates of groundcover by herbaceous species will be made to verify aerial coverage. Any indications of damage from trespassing or herbivory will be noted. In addition, GE will arrange for a qualified individual to assess the apparent vigor of the planted specimens using best professional judgment based on accepted restoration standards and familiarity with local conditions. Any herbaceous planting area within the Newell Street parking lot area with less than 100% cover will be supplemented with additional planting and seeding. Recommendations will also be made for supplemental activities such as additional fertilizing or watering, and implementation of measures to reduce herbivory. In the event a significant loss of plantings (greater than 1/4 acre) is observed during one of the visits and GE is required to conduct replanting activities, the timing for

monitoring of that area will be restarted following replanting activities. GE will not be required to replant an area if the loss of vegetation or growth failure is caused solely by actions of a third party (excluding a GE contractor).

During each of the monitoring visits, GE will also inspect for the presence of invasive species within the Newell Street parking lot area. Invasive species of concern are Amur honeysuckle, Autumn olive, Black locust, Black swallow-wort, Common barberry, Common buckthorn, Garlic mustard, Glossy buckthorn, Goutweed or Bishop's weed, Japanese barberry, Japanese honeysuckle, Japanese knotweed, Morrow's honeysuckle, Morrow's X Tatarian honeysuckle (hybrid), Multiflora rose, Norway maple, Oriental bittersweet, Phragmites - Reed grass, Porcelain berry, Purple loosestrife, Russian olive, Tatarian honeysuckle, and Yellow iris. GE will ensure that no greater than 5% of any area within Newell Street parking lot area is covered with invasive species. Invasive species will be removed in an appropriate manner.

GE will prevent shrub and tree growth within the Newell Street parking lot area through various means (i.e., periodic mowing, shrub/tree removal, etc.). Mowing will be conducted once every one to three years, and will occur no earlier in the year than August 1.

GE will inspect the other engineering structures utilized within the Newell Street parking lot area as part of the restoration activities on a yearly basis for three years to ensure their integrity and ability to function. GE will inspect the bluebird box to ensure that it has not become damaged. If the damage is sufficient to render the box uninhabitable by bluebirds, then it will be replaced. Rock piles and stumps will be inspected to ensure that major damage from acts such as vandalism have not leveled or relocated the structures. Due to the use of these structures by small mammals for the creation of dens, GE will only conduct maintenance upon the rock piles and stumps (e.g., restacking the rock piles and/or reorienting the stumps) in the case of catastrophic damage to the structures.

Reporting

GE will prepare and submit to the Trustees an event-specific report on these inspection, monitoring, and maintenance activities, including the results of the inspections and any maintenance activities performed. The report will be prepared using field notes and other information collected during each of the monitoring visits. The report will include photographic documentation of the conditions of the Newell Street parking lot area. Such a report will be submitted to the Trustees, with copies to U.S. Environmental Protection Agency (EPA) and Massachusetts Department of Environmental Protection (MDEP), within 90 days of the inspection.

Attachment B

New England Wildflower Mix





PHONE: 413.548.8000 FAX:413.549.4000 EMAIL: INFO@NEWP.COM

WEB ADDRESS; WWW.NEWP.COM

2005 NEW ENGLAND WILDFLOWER MIX			
SPECIES	PERCENT		
Creeping Red Fescue (Festuca rubra)	23		
Little Bluestem (Schizachyrium scoparium)	15		
Indian Grass (Sorghastrum nutans)	15		
Partidge Pea (Chamacorista fasciculata) Showy Tick-Tretoil (Desmodii	um canaderal O		
Wild Blue Lupine (Lupinus perennis)	8		
Canada Wild Rye (Elymus canadensis)	6		
Zig-Zag Aster/New York Aster Mix (Aster prenanthoides/novi-belgi mix)	5		
New England Aster (Aster novae-angliae)	5		
Wild Senna (Cassia hebecarpa)	3		
Common Milkweed (Asclepias syriaca)	6		
Golden Alexanders (Zizia aurea)	2.5		
Butterfly Milkweed (Asclepias tuberosa)	1.5		
TOTAL	100		

APPLICATION RATE: 15 LBS/ACRE

2904 SQ. FT./LB

Price:

\$45.00/LB (bulk)

FOB plus shipping & handling (plus tax if applicable)

The New England Wildflower Mix provides a selection of native wildflowers and grasses to ensure that a variety of the species will survive in all conditions encountered from dry to moist. It is an appropriate seed mix for roadsides, commercial landscaping, parks, golf courses, industrial sites and areas undergoing ecological restoration. The mix may be applied by hydro seeding on slopes, by mechanical spreader, or on small sites it may be spread by hand. When applying on bare soil, rake the soil to create grooves, apply seed, then lightly rake over. In New England, the best results are obtained with an early Spring seeding. Summer seeding can be successful with a light mulching of weed free straw to conserve moisture. Late Fall and Winter dormant seeding require a slight increase in the seeding rate. Fertilization is not required unless the soils are particularly infertile.